

Customer No.: 31561
Docket No.: 11585-US-PA
Application No.: 10/709,509

REMARKS

Present Status of the Application

The Office Action rejected claims 9 and 10 under 35 U.S.C. 112, second paragraph, because there is insufficient antecedent basis for the limitation "the light source brightness balance module" in claim 9. The Office Action rejected claims 1-3 and 5-10 under 35 U.S.C. 102(b) as being anticipated by Nitta et al. (hereinafter "Nitta" US 2002/0057238). The Office Action rejected claims 4 and 11-15 under 35 U.S.C. 103 (a) as being unpatentable over Nitta et al. (hereinafter "Nitta" US 2002/0057238) in view of Hirakata et al. (hereinafter "Hirakata" US 2002/0067332).

Discussion of Rejection Under 35 U.S.C. 112

The Office Action rejected claims 9 and 10 under 35 U.S.C. 112, second paragraph, because there is insufficient antecedent basis for the limitation "the light source brightness balance module" in claim 9.

In response thereto, applicants have amended the limitation "the light source brightness balance module" in claim 9 to "**the blinking control module**", which can be supported by [0030] of this application. There is sufficient antecedent basis for the limitation "**the blinking control module**", and the rejection addressed to claims 9 and 10 should be withdrawn.

Discussion of Rejection Under 35 U.S.C. 102(b)

The Office Action rejected claims 1-3 and 5-10 under 35 U.S.C. 102(b) as being

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anticipated by Nitta et al. (hereinafter "Nitta" US 2002/0057238).

With respect to amended independent claim 1, it recites the features as follows:

I. A blinking backlight device, comprising:

a storage unit, for storing at least one $(N-1)^{\text{th}}$ frame data; and

a blinking control module, having an image detection unit, connected to a data source and the storage unit, for receiving a N^{th} frame data and comparing the N^{th} frame data with the $(N-1)^{\text{th}}$ frame data read from the storage unit according to a motion image detection algorithm to output a detection signal, so as to determine whether or not to enable a blinking backlight accordingly;

wherein N is a positive integer larger than or equal to 2.

Nitta discloses a switching controlling circuit 25 for a liquid crystal display 36. The switching controlling circuit 25 comprises a data storing unit 50, a data comparing unit 52 and a pulse controlling unit 53. The data storing unit 50 is used to store display information. The data comparing unit 52 is used to compare the display information stored in the data storing unit 50 with present display information. The pulse controlling unit 53 is used to fetch an output from the data comparing unit 52 and generate a starting time PS of a 1st time-period (i.e. a lighting-up time-period) of a light-source light-up signal BL and a time PW of the 1st time-period (please see [0098] and Fig. 18). The starting time PS and the time PW can be used to adjust a duty cycle of the light-source light-up signal BL (please see [0099] and Fig. 19). That is, the output signals from the

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data comparing unit 52 is used to adjust the duty cycle of the light-source light-up signal
BL. Nitta fails to teach or suggest that the detection signal outputted from the image detection unit can be used to determine whether or not to enable a blinking backlight.

For at least the foregoing reasons, applicants respectfully submit that Nitta does not teach each and every element in claim 1. Accordingly, amended independent claim 1 patently defines over Nitta, and should be allowed.

Claims 2-3 and 5-10 should also be patentable since they depend on allowable claim 1 directly or indirectly.

Discussion of Rejection Under 35 U.S.C. 103(a)

The Office Action rejected claims 4 and 11-15 under 35 U.S.C. 103 (a) as being unpatentable over Nitta et al. (hereinafter "Nitta" US 2002/0057238) in view of Hirakata et al. (hereinafter "Hirakata" US 2002/0067332).

As mentioned above, Nitta fails to teach or suggest that the detection signal outputted from the image detection unit can be used to determine whether or not to enable a blinking backlight.

Furthermore, Hirakata discloses that the image movement degree detection circuit (shown in Fig. 6) generates the light control signal 106 according to the image movement degree, and output the light control signal 106 to the backlight control circuit (shown in Fig.7). The backlight control circuit controls the driving of the light sources 35 in

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response to the light control signal 106. Shown in Figs.1B to 1E are lamp luminosity waveforms under various duty cycles (i.e. operating modes of the light sources 35 under various image movement degrees). That is, Hirakata only discloses that the luminosity of the light sources 35 can be changed by adjusting the duty cycle of the driving signal (output signal of the inverter 109). Hirakata fails to teach or suggest that the detection signal outputted from the image detection unit can be used to determine whether or not to enable a blinking backlight.

Therefore, a person of ordinary skill in the art can not combine Nitta with Hirakata to achieve all of the features as set forth in claim 1. So amended independent claim 1 is patentable over Nitta in view of Hirakata, and thus should be allowed.

Claim 4 should also be patentable over Nitta in view of Hirakata since it depends on patentable claim 1 directly.

With respect to amended independent claim 11, it recites the features as follows:

11. A method of operating a blinking backlight device, comprising:
determining whether an image displayed comprises a motion image or not
according to two continuous frame data;
when the image displayed comprises a motion image, a blinking backlight is enabled; and
when the image displayed does not comprise a motion image, a blinking backlight is disabled.

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As the reasons similar to amended independent claim 1, both of Nitta and Hirakata fail to teach or suggest that the blinking backlight can be enabled or disabled according to whether the image display comprises a motion image or not. Therefore, a person of ordinary skill in the art can not combine Nitta with Hirakata to achieve all of the features as set forth in claim 11. So claim 11 is patentable over Nitta in view of Hirakata, and thus should be allowed.

Claim 12-15 should also be patentable over Nitta in view of Hirakata since it depends on patentable claim 11 directly or indirectly.

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CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-15 of the present application patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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